## **SCIENCE**

2008-2009

# DIRECTIONS FOR COMPLETING YOUR ONLINE PORTFOLIO AND IMAP—INDIANA MENTORING AND ASSESSMENT PROGRAM

- 1. Make sure your school corporation has assigned you a mentor and has enrolled you in IMAP. You should have been instructed to open a TOLS (Teacher online system) account and you should have received an automated confirming email which verified that you have accepted your assigned mentor. Please keep a copy of that email for your files.
- 2. Soon after your online enrollment is completed, you will receive an instructional email from smartDESKTOP, a teacher tool found on the IDOE (Indiana Department of Education) website. (www.doe.in.gov)
- 3. Navigate to the IDOE website, <a href="www.doe.in.gov">www.doe.in.gov</a> .
  Go to Educator Licensing/Professional Standards, <a href="www.doe.in.gov/dps">www.doe.in.gov/dps</a> Click on "Beginning Educator. Choose Second Year Teacher. Navigate to your content area to download your requirements.
- 4. Download the documents from the Office of Educator Licensing and Development website above.
- 5. REQUIRED FORMS THAT NEED TO BE UPLOADED TO SMARTDESKTOP ARE MARKED IN YOUR PACKET AND ARE DESIGNATED IN THE CHECKLIST FOUND AT THE END OF EACH PACKET.
- 6. Directions for smartDESKTOP.
- a. Log on to smartDESKTOP.
- b. Navigate to the Instruction tab.
- c. Begin creating lesson plans
- d. Rely on smartDESKTOP HELP to answer questions.
- e. When you have completed all five days of plans, and attached all supporting material, navigate to Collaboration, add colleagues and add the area that best fits your situation. For example, if you are a science teacher in Grade 1, choose Science, Grade 1.

After you have completed all of the above steps, please email portfoliocomplete@doe.in.gov

Include this information in your email:

YOUR NAME SCHOOL NAME GRADE LEVEL COLLABORATION GROUP YOU CHOSE

You will receive an automated email that states that we have received your submission. You should print this email for your receipt.

Within 4 weeks you will receive an email from our office. This email will include a PDF attachment of both a pass/fail letter and a verification form to be signed by your principal, mentor and yourself. Also, we will include information for applying for your next license.

# COMPLETED PORTFOLIOS WILL BE ACCEPTED AFTER NOVEMBER 1, 2008 UNTIL MAY 1, 2009.

ANY SUBMISSIONS OUTSIDE OF THIS TIME FRAME WILL NOT BE SCORED AND THE CANDIDATE WILL NEED TO WAIT UNTIL THE FOLLOWING SCHOOL YEAR TO SUBMIT A PORTFOLIO.

Please plan ahead to submit your portfolio in a timely manner. If you have been enrolled in IMAP for two years and you cannot submit by May 1, 2009, you need to request an extension. This request should be received in our office not later than April 15. (link to extension form)

http://www.doe.state.in.us/dps/beginningteachers/special\_circumstances.doc Last minute technology or other issues will not constitute a good reason for an extension. Please plan in advance.

FOR SPECIFIC QUESTIONS ABOUT YOUR PORTFOLIO, EMAIL imaphelp@doe.in.gov

# TEACHING PORTFOLIO CLASS PROFILE FORM REQUIRED---ATTACH TO LESSON ONE USING THE ONLINE PORTFOLIO

Portfolio: Content area:	Unit n	ame:			
Class that is the focus of the portfolio: C					
Class sessions during the instruction	al unit: Blo	ock schedul	le		
(Specify & describe)					
Class meetings with the selected cl	ss per year:				
Grade level(s) in your portfolio class: pre	k 1 2 3 4 5	6 7 8 9	10 11	12	
	ll that apply)				
Composition of your portfolio class:					
Number of boys	%	Black			
Number of girls		Hispanic			
Number of bilingual student	%	White			
Number of students identified	as%	Asian/Pac			
special education students		American Biracial	Indian/Al	askan Nati	ıve
Ability grouping: heterogeneous	homogeneous (	_ advanced	, ave	rage, {	general)
Primary texts used in portfolio class ( <i>Please ptextbooks or laboratory manuals, etc.</i> )	ortae iiie, aaiioi	, puousici,	ana aare	oj publici	nion of an
instruction)  Number of other adults in the room during portion or more, please specify title(s)/role(s):  □ Paraprofessional □ Parent volution □ Other  Conteacher □ Other  Community: □ Rural □ Suburban □ Mostly affluent families □ Mostly lower middle-class families □ Mixture of economic statuses (Describes School: □ Pre-K □ Elementary □ Testal number of students in the school	(Check all that ap nteer  Urban Mostly u Significa ) _Middle or Junio	<i>ply)</i> _ Other pper middle nt number			
Total number of students in the school	'ublic Priva	te			
Access to Technology:	stional -	daanata		antin a	
Basic four function calculators exc	ouonai a	dequate	Wa	anting	
Scientific calculators exc					
Graphing calculators exc		•	Wa		
Computers exc			Wa	-	
Manipulatives for inquiry exc			Wa	_	
Consumables for Inquiry exc			Wa		
Other technology (e.g., projection screen for	omputer or calcula	tors, probes	s, internet	connection	n)
Your Mentor: Building level content-specific supervious (e.g., department chair)	or I I	nterdiscipli	alized (m nary tean	ost or all s n	subjects taught)
Building level content- specific teache		Department Other	anzeu and	ı mieraisc	іршагу
CHIC		ALICI.			

# COMMENTARY ON THE LEARNING COMMUNITY SCIENCE

### REQUIRED --- ATTACH TO LESSON ONE USING THE ONLINE PORTFOLIO

Using the Online Portfolio program, write a commentary that sets the context for instruction in terms of the community, the class, and the students in the class. In the commentary, please respond to the following prompts.

- Describe the composition of your class and the type of community from which your students come.
- Describe how the learning community in your classroom supports students' cognitive and affective development.
- Describe the ways in which you help your students develop standard safety procedures during laboratory investigations.
- Describe the ways in which you help your students develop scientific reasoning.
- Describe how you provide students with opportunities to understand and appreciate the diverse culture(s) and diverse perspectives of others.

# DESCRIPTORS FOR STUDENT A AND STUDENT B REQUIRED --- ATTACH TO LESSON ONE USING THE ONLINE PORTFOLIO

Please provide the following information for Student A and Student B:

- 1. Age
- 2. Grade
- 3. Instructional level
- 4. Preferred learning style(s)
- 5. Strengths and weaknesses
- 6. IEP goals and objectives ( if any)
- 7. Time per week that you provide instruction for student
- 8. Accommodations (As denoted in IEP or ones that you have implemented.)
- 9. Cultural or environmental factors which impact student learning
- 10. Sources used to gather information about the student

The chart will accommodate as much information as you need to list. However, you should limit your submission to not more than two pages.

Information	Student A	Student B
Age		
Grade		
Instructional level		
Preferred learning		
style(s)		
Strengths and		
weaknesses		
IEP goals &		
objectives (if any)		
Time per week		
providing		
instructions for		
student		
Accommodations		
Cultural or		
environmental		
factors which impact		
Sources used to		
gather information about the student		
about the student		

## COMMENTARY ON SERIES OF 5 LESSONS SCIENCE

### REQUIRED---ATTACH TO LESSON ONE USING THE ONLINE PORTFOLIO

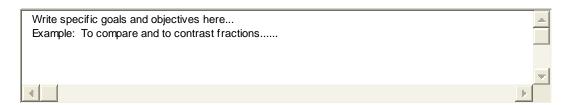
An effective instructional plan focuses on students' development and integration of content knowledge, skills and strategies with the development of behaviors that help them to become independent and to think critically.

- The instructional plan accommodates student learning needs and interests and allows for instructional adjustments.
- Instructional planning of concepts and activities that build on each other and are responsive to students' learning needs is the basis for effective instruction to help students develop conceptual understanding.
- The instructional plan needs to reference the *Indiana Academic Standards*.
- Using the Online Portfolio program, write a commentary about the important science concept(s) that your class will learn during the featured five-day segment. Respond to the following questions and/or prompts:
  - What concept(s) have you chosen to teach, and how are they important for student learning?
  - Describe the prior knowledge of students in your class. How does their previous experience affect your instructional planning for this learning segment?
  - How can you extend the concept(s) to other content areas?
  - How did you adapt the lesson to meet the needs of diverse learners?

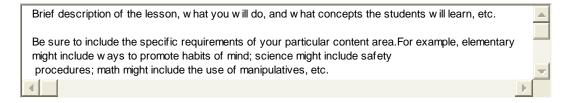
### Long Plan REQUIRED

Expanded Lesson This is an example. You will create your plans in smartDESKTOP.

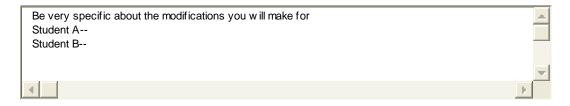
#### Goals/Objectives:



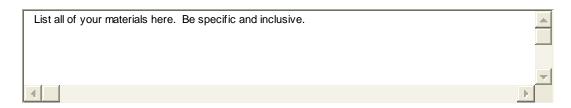
#### Overview:



#### **Modifications:**



#### Materials:



#### Assessment Plan:

List the type of assessment/student w ork you w ill use. If from a printed source, note name and page.
i.e, Scott-Foresman, math assessment, pg. 34
You should have student w ork from each day. On one of your days, you should have used a teacher made rubric or assessment to chart student grow th.
Present w ork from Student A and Student B to your mentor for their review.

### ANALYSIS OF TEACHING AFTER EACH LESSON SCIENCE

# FIVE LESSONS IN ALL --- REQUIRED --- ATTACH ONE TO EACH LESSON USING THE ONLINE PORTFOLIO

**Using the Online Portfolio program**, write up to an analysis of your teaching by answering the following prompts. This exercise is for each of the five lessons.

- What did you expect students to learn during the lesson? If the expectations for learning were different for Students A and B and their instructional group(s), describe both. How did you modify, if necessary, the learning environment for this lesson to ensure the participation of all students?
- List and describe in sequential order, the instructional strategies, learning activities, and resources you used to promote student learning during the lesson. If instructional strategies, learning activities, and/or resources were different for Students A and B and their instructional group(s), describe both.
- What were the criteria for student success for the lesson and how was it communicated to the class? If the criteria for student success for the lesson were different for Students A and B and their instructional group(s), describe both.
- How did you monitor students' learning and what did you learn about students' progress toward the science concept(s)? How and what did you communicate to students about the results of their performance/work?
- How did you promote inquiry-based learning?
- Based on the performance/work of your students for the lesson, how will you adjust, if necessary, your teaching for the next lesson?

### VIDEO DIRECTIONS REQUIRED ACTIVITY

- Choose a laboratory investigation lesson to videotape. The video of the laboratory investigation must include three unedited segments: pre-lab discussion, lab investigation, and post-lab discussion. These may occur on different days. The video should be used primarily to illustrate the nature of inquiry from the perspective of the student, group, and teacher. Teacher and students <u>must</u> comply with the standard safety procedures during laboratory investigations, including, but not limited to, wearing proper protective apparel.
- Before you tape, please send home videotaping permission forms. Keep these for your records.
- Ask a colleague or your mentor to do the taping for you.
- You may use whatever filming media you have at your disposal.
- You video should be at least 15 minutes in length and not exceed 30 minutes.
- The video should include instruction by the teacher and interaction with the students. Review the video commentary you will be completing to make sure all those areas are covered in your video.
- Review the video by yourself or with your mentor. Complete your commentary. Attach it to the appropriate lesson.
- Allow your mentor to view your video. Mentor should complete their checklist, email it to you and you should attach this sheet to the designated lesson using the Online Portfolio program.
- **DO NOT send your video to DOE**.

#### **Notice to Parents or Guardians**

#### Dear Parent/Guardian:

I am participating in the Indiana Mentoring and Assessment Program developed by the Indiana Division of Professional Standards. The DPS is developing a new assessment system for licensing beginning teachers based upon standards for teaching. Beginning teachers will develop a performance portfolio to demonstrate what they know and are able to do. The goal of this program is to give new teachers more support and guidance to improve teacher quality while linking teaching standards to student standards for improved student learning.

I am sending you this letter to notify you that I will be video recording selected lessons in my classes and submitting examples of student work as evidence of my teaching. Although the video will include both the students and me, the primary focus of the recording is on my teaching not the students in the class. Your child may be included in this video or his/ her work included in the written materials I submit.

Please be aware students' names will not be included on any of the materials I submit, nor will students' identities or the school be revealed. The Division of Professional Standards will only use the materials I submit for evaluation of my teaching, for research purposes, and for training educators.

If you object to your child being shown in the video recording, please let me know. Thank you for your help and consideration in this matter.

Sincerely,		
	Data	
	Dates	

### Aviso a los Padres o Tutores

#### Queridos Padres o Tutores:

Soy participante en el programa "Indiana Mentoring and Assessment", un programa desarrollado pr el Division of Professional Standards (La Administracion Profesional de los Requisitos de Indiana). Esta Administracion esta desarrollando un nuevo sistema de evaluar a los maestros al graduarse de la universidad, basado en los requisitos para la ensenanza. Los nuevos maestros van a preparar una cartera de realizacion para mostrar lo que sepan y lo que sean capaz de hacer. El objetivo de este programa es dar mas apoyo y direccion a los nuevos maestros para mejorar la calidad de la ensenanza mientras que se conectan los requisitos de los maestros a los de los estudiantes para que los estudiantes aprendan mejor.

Les mando a Uds. esta carta para avisarles que voy a grabar en video unas lecciones en mis clases y que pienso entregar unos ejemplos del trabajo de los estudiantes como prueba de mi capacidad de ensenar. Aunque el video va a incluirnos a los estudiantes y a mi, el foco principal del video es de mi ensenanza, no de los estudiantes. Es posible que incluya a su hijo/a en el video y de que su trabajo sea incluido en las obras que yo entregue.

Quisiera que Uds. se den cuenta de que los nombres de los estudiantes no aparecen en el video, ni su identidad, ni el nombre de la escuela. La Administración de Los Requisitos de Indiana solo usan las obras que yo entregue para valorar mi ensenanza, para hacer investigaciones y para instruir a los maestros.

Si Uds. se oponen a que su hijo/a sea incluido en la grabacion, haganme el favor de avisarmelo. Les agradezco mucho su cooperacion en este asunto.

Sinceramente,	
	Fecha:

# COMMENTARY ON THE VIDEO REQUIRED --- ATTACH TO THE LESSON YOU VIDEOTAPED

Using the Online Portfolio program, write a commentary analyzing and reflecting upon the video lesson. Include your observations from reviewing the video and the students' work as part of this commentary.

- Were the task(s) and concept(s) implemented as planned? What changes did you make, and why did these changes occur?
- Analyze the questions, conjectures, observations, and/or discussion with respect to the students' understanding of the concept or procedure.
- Cite examples from the video that show how you gathered information about what the two students were learning, and how you used this information to modify the instruction during the lesson. Cite specific examples from the video and the two students' work to support the observations and analysis.
- Compare the objectives for student learning to the student learning observed in the video.

# MENTOR REFLECTION FORM ON VIDEO REQUIRED---EMAIL TO PROTÉGÉ TO ATTACH TO APPROPRIATE LESSON USING <u>THE ONLINE PORTFOLIIO</u>

Mentors: Please complete this checklist, and then email it to the candidate.		
Mentor name:		
The teacher used one of his/her five smartDESKTOP lesson plans in the vio	leo. Yes	No
Comments or evidence:		
The teacher spoke in a clear and understandable manner.	Yes_	No
Comments or evidence:		
The teacher provides students with opportunities to reason, ask questions, a ideas about science.	nd communi	cate their
Comments or evidence:	Yes _	No
The teacher demonstrates and provides students with opportunities to learn	proper labor	atory safety standards
	Yes	No
Comments or evidence:		
The teacher provides students with opportunities to develop inquiry-based l	earning	
	Yes	_ No
Comments or evidence:		

MY COMPLETION OF THIS FORM ONLY SERVES TO DOCUMENT WHAT I OBSERVED. IT IS NOT AN EVALUATION OF TEACHING.

# ACTIVITY ON STUDENT WORK/ASSESSMENTS REQUIRED

Provide to your mentor the COMPLETED AND SCORED student work/assessments from Student A and Student B for all five days of your lesson plans. Your analysis of this work is addressed in your daily analysis. Your mentor will complete the following checklist, email it to you and you will attach the mentor reflection to Lesson Five **using the Online Portfolio program**.

# MENTOR REFLECTION FORM ON STUDENT ASSESSMENTS/WORK REQUIRED---ATTACH TO LESSON FIVE USING THE ONLINE PORTFOLIO

Mentors: Please complete this checklist to be attached by the candidate.		
Mentor Name:		
The teacher presented student work for two students from ALL lessons.	Yes	No
Comments or evidence:		
The work was an appropriate tool to measure the skills taught.	Yes	No
Comments or evidence:		
The teacher provided the students with clear and concise feedback.	Vac	No
Comments or evidence:	168	140
The teacher could explain what the assessment/work meant and how futu upon the data.	re lessons v	vould be changed based
	Yes	No
Comments or evidence:		
The teacher provides additional expertunities for rainforcement/reteaching	va Vas	No
The teacher provides additional opportunities for reinforcement/reteachir Comments or evidence:	ig. res	INO
Comments of evidence.		

MY COMPLETION OF THIS FORM ONLY SERVES TO DOCUMENT WHAT I OBSERVED. IT IS NOT AN EVALUATION OF TEACHING.

# REFLECTION ON TEACHING AND LEARNING REQUIRED---ATTACH TO DAY FIVE USING THE ONLINE PORTFOLIO

Summarize your teaching and the student learning throughout the five days of lesson plans. Be sure to address the following prompts.

- What did you learn about your students' ability to analyze content using science skills over the whole unit?
- How did your unit design, instructional strategies, and assessments support students' abilities to develop and/or use science skills during the whole unit?
- How can you improve the unit design, instructional strategies, and assessments of this unit for a similar group of students in the future? Be specific and support your ideas with relevant evidence from the portfolio.

#### FINAL STEPS

When you are satisfied that you have met all of the requirements of the portfolio submission, please proceed as directed:

- 1. In smartDESKTOP, navigate to "Collaboration", then choose "Add colleague". In the drop down box choose the area which best fits your portfolio submission, i.e. Grade 1, Elementary; Grades 6-12, Music, etc.
- 2. Email portfoliocomplete@doe.in.gov
- 2. Include in the email the following information:

YOUR NAME YOUR SCHOOL DATE SPAN OF YOUR LESSONS (ex. Week of April 15-20) COLLABORATION GROUP YOU CHOSE (i.e. Grade 1, Elementary; Grades 6-12, Music, etc.)

- 3. You will receive an automated response from our office. Please print this to serve as your receipt of submission.
- 4. In approximately four weeks, you will be emailed from our office with your portfolio results. This email will include a pass/fail letter, a verification form to be signed by you, your mentor and principal and further directions for license renewal.

### PORTFOLIO CHECKLIST

1. Profile Form (attach to Lesson One)
2. Commentary on Learning Community (attach to Lesson One)
3. Descriptors for Student A and Student B. (attach to Lesson One)
4. Commentary on Series of 5 lessons. (attach to Lesson One)
5. Lesson Plans for 5 contiguous days (smartDESKTOP)
6. Analysis of teaching (attach to each day's lesson, 5 in all)
7. Videotape. Review and share with mentor.
8. Commentary on video. (attach to appropriate lesson)
9. Mentor reflection on video (attach to appropriate lesson)
10. Student Work. Share student work/assessments with mentor.
11. Mentor reflection on student work. (attach to Lesson Five)
12. Reflection on teaching and Learning. (attach to Lesson Five)
Remember: Your portfolio will be completed entirely online. So not mail any items to the DOE.

The following attachments are presented for your information only and to support you as you build your portfolio.

### STANDARDS-BASED TEACHING IN SCIENCE EDUCATION

The Indiana Science Teaching Portfolio documents the beginning teacher's implementation of the teaching practices described in the INTASC principles and *Indiana Standards for Teachers of Science*.

The portfolio assessment focuses on the following abilities:

- to plan and implement a short learning unit in science
- to engage students in the learning of science concepts, processes and applications
- to reflect on the quality of teaching and student learning

To develop the portfolio, base your lessons on the *Indiana Academic Standards*. Use the *Indiana Standards for Teachers of Science* as a guide since these standards reflect the values of the Indiana science education community and serve as the basis for the evaluation of teachers' mastery of the licensure performance standards.

The central goal of science education is to assist students in the development of science literacy. *The National Science Education Standards* and the *Indiana Academic Standards* define science literacy as an understanding of the following:

- the <u>content</u> of science (life, physical and earth sciences concepts and theories)
- **the <u>nature</u> of science** (inquiry)
- the <u>context</u> of science (historical, societal and technological aspects)

Science literacy also includes the ability to read, write, and talk about science, using appropriate science vocabulary and information resources.

To access the Indiana Standards for Teachers of Science, go to the DPS website:

Office of Educator Licensing and
Development
www.doe.state.in.us/dps

Click on "Standards"

Each beginning teacher seeking eligibility for a Proficient Practitioner License must meet the following standards of completion.

### **Definition of Standards of Completion**

The standards of completion have three components: comprehensiveness, adequacy, and timeliness of submission, all of which must be met.

#### 1. Comprehensiveness

All components of the teaching portfolio are present.

#### 2. Adequacy

The contents of the portfolio reflect that the beginning teacher *has followed the portfolio handbook directions* with regard to the following:

- period of time teaching is documented
- nature and quantity of student work
- content of the lesson commentaries (i.e., teacher's narrative is consistent with the questions asked)

#### 3. Timeliness of submission

The portfolio must be submitted by the specified deadline. The submission window is November 1, 2008 to May 1, 2009. Any requests for extensions need to be submitted in writing (email is NOT acceptable) by April 15, 2009.

#### **Conduct in Accordance with the Code**

The teaching documented in the portfolio must reflect professional and ethical conduct.

#### Consequences for Failure to Meet Standards of Completion at End of Year Two

The beginning teacher will be required to participate for an additional year in the IMAP and re-submit a portfolio during year three. A copy of the letter informing the beginning teacher that he/she has not met the standards of completion will be sent to the superintendent and principal.

### Consequences for Failure to Meet Standards of Completion at End of Year Three

The beginning teacher is considered to have not met the IMAP requirements and is not eligible for a re-issuance of the Initial Practitioner License. In order to be eligible to teach in the future in an Indiana public school, the candidate must petition the Office of Educator Licensing and Development to determine future eligibility for an Initial Practitioner License.

### **Confidentiality**

Every effort is made to keep your name, school, and students' names confidential. Your portfolio and related materials may be used for training scorers and mentors, but your identity will be kept private.

If your portfolio is to be used for any other purposes, your written permission will be requested.

Do not use your name or the name of your school in any part of your portfolio documentation.

The student work that your mentor reviews must be original and authentic. Student names should be removed from these documents.

### **Videotaping**

Prior to videotaping, notify parents or guardians of students in your class about the purpose of the videotapes required for your portfolio submission. English and Spanish parent/guardian notification forms are included in this packet. (link to forms) Please keep these forms in your possession; they do not need to be submitted to our office. You may use whatever type of media you have to video your classes and play back for you and your mentor. No videos, tapes, CD's or DVD's are required to be submitted to our office.